

## REMARKS

Entry of the foregoing, re-examination and reconsideration of the subject matter identified in caption, as amended, pursuant to and consistent with 37 C.F.R. § 1.111, and in light of the remarks which follow, are respectfully requested.

By the present Amendment, claims 7, 9, 11, 13, 15, 17, 19 and 21 have been canceled without prejudice or disclaimer. Claims 1-5 were previously canceled. No new matter has been added.

Upon entry of the Amendment, claims 6, 8, 10, 12, 14, 16, 18 and 20 will be all of the claims pending in the application.

### **I. Response to Rejection under 35 U.S.C. § 103(a)**

a. Claims 6-9 were rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over JP 11-152260 (JP '260).

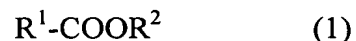
b. Claims 6-13 were rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over JP '260 in view of U.S. Patent No. 5,470,992 to Gruning et al.

c. Claims 6-9 and 14-17 were rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over JP '260 in view of Chem. Abstr. CS-237747, 1985, by Csiba et al.

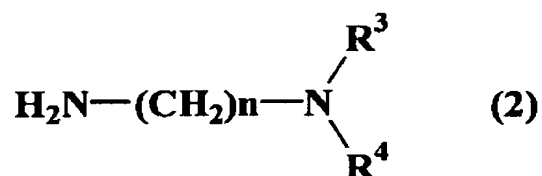
Applicants respectfully submit that the rejections of claims 7, 9, 11, 13, 15 and 17 are moot because these claims have been canceled. Further, Applicants respectfully traverse the rejections of claims 6, 8, 10, 12, 14 and 16 for the following reasons.

Independent claim 6 relates to a production process for carboxylic amide, characterized by reacting higher fatty acid or an ester thereof represented by the following Formula (1) with diamine represented by the following Formula (2) under the presence of

0.001 to 0.1 mass % of an organic phosphonic acid compound based on the whole amount of the higher fatty acid or the ester thereof described above:



in Formula (1) described above,  $R^1$  represents a linear or branched alkyl group, an alkenyl group or a hydroxyalkyl group having 5 to 23 carbon atoms, and  $R^2$  represents a hydrogen atom, a linear or branched alkyl group having 1 to 4 carbon atoms or a residue obtained by removing one acyloxy group from glyceride;



in Formula (2) described above,  $R^3$  and  $R^4$  represent an alkyl group having 1 to 4 carbon atoms and may be the same or different, and  $n$  represents a number of 2 to 4. The thus-produced amideamine can exhibit an improved color tone.

JP '260 discloses that an amideamine compound is obtained by reacting a fatty acid or an ester thereof with a diamine by means of a conventional method (paragraph [0009]). In JP '260, an organic phosphoric is added in producing an amideamine oxide from an amideamine and hydrogen peroxide.

On the other hand, in the present application, the organic phosphoric acid is added to enhance a conversion of the oxidation of the amideamine. As a result, a color tone and an odor of the product can be improved. JP '260 does not disclose or suggest these effects achievable in the presently claimed invention.

As described in paragraph [0002] of JP '260, it has been known that if an amideamine oxide compound aqueous solution contains much unreacted amideamine compound, it exerts adverse effects on the color tone, odor, detergency and skin irritation, etc. JP 60-55060 B,

which is cited in JP '260, also discloses the above noted fact, that is, a high conversion of 99 % or more in oxidation of a tertiary amine and adverse effects of unreacted amine on the color tone and odor of the amine oxide. JP '260 is directed to a process in which an organic phosphoric acid compound is added to the reactant system in the amideamine oxide production to enhance the conversion of oxidation so that an amideamine oxide having stability with passage of time in the color tone and odor is obtained. This is also illustrated by the Examples in JP '260.

The presently claimed invention is directed to improvement of the color tone of an amideamine, but not an amideamine oxide, and is not obvious to a person of ordinary skill in the art.

Gruning et al. and Csiba et al. are relied upon merely as disclosing betaine derivatives and quaternary ammonium salt derivatives, respectively, and thus do not rectify the above noted deficiencies of JP '260. As such, even if Gruning et al. and Csiba et al. are combined with JP '260, the combinations still would not result in the subject matter recited in present claim 6.

In view of the foregoing, Applicants respectfully submit that claim 6 is patentable over JP '260, in view of Gruning et al. and Csiba et al., and thus the rejections should be withdrawn. Additionally, claims 8, 10, 12, 14 and 16 depend from claim 6 and thus are patentable over the cited references at least by virtue of their dependency.

## **II. Response to Claim Objection**

Claims 18-21 were objected to as allegedly depending from a rejected base claim.

Applicants respectfully submit that the objection of claims 19 and 21 is moot because they have been canceled. Further, claims 18 and 20 depend from claim 6. Applicants

respectfully submit that the rejections of claim 6 have been overcome as set forth above, and thus the objection should be withdrawn.

**III. Conclusion**

From the foregoing, further and favorable action in the form of a Notice of Allowance is believed to be next in order and such action is earnestly solicited. If there are any questions concerning this paper or the application in general, the Examiner is invited to telephone the undersigned at (202) 452-7932 at her earliest convenience.

Respectfully submitted,

BUCHANAN INGERSOLL & ROONEY PC

Date: January 2, 2009

By: \_\_\_\_\_



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